OPT-SMC: IMPLEMENTATION RESEARCH TO OPTIMIZE DELIVERY AND EFFECTIVENESS OF SEASONAL MALARIA CHEMOPREVENTION

Preventive chemotherapies are key elements of the comprehensive package of malaria prevention and control measures recommended by WHO. These include seasonal malaria chemoprevention (SMC), intermittent preventive treatment of pregnant women (IPTp), and, in areas where SMC cannot be used, intermittent preventive treatment of infants (IPTi). The objective of these interventions is to prevent malaria by administering antimalarial drugs at intervals to all individuals in the target group.

PREVENTING MALARIA IN CHILDREN THROUGH SMC

SMC involves monthly administration of the antimalarials sulfadoxine-pyrimethamine and amodiaquine to all children under 6 years old during the malaria season. Across the Sahel and sub-Sahel regions of Africa, deaths and severe illness caused by malaria occur mainly in young children during the rainy season, which generally lasts four to five months. SMC for four or five months each year can provide children with a high level of protection.

Nantané Doumbouya of Faralako, Guinea, lost two children to malaria. They became anemic, and she took them to a health centre in Kankan for blood transfusions, but it was too late.

"But now that these medicines are being given, my daughter hasn't had this problem, and my niece hasn't either."

THE CHALLENGE

In the face of the slow-down in global progress against malaria, WHO has highlighted the urgency of strengthening the delivery of proven interventions such as SMC. Even though SMC is intended to be used only in the Sahel and sub-Sahel, the very high burden in these regions means that optimizing the delivery of SMC could make a substantial contribution to reducing the global burden of malaria mortality.

In 2019, SMC programmes reached 22 million children. However, many of these children do not receive the full number of monthly treatments that are needed to protect them throughout the high-risk period, and there remain an estimated 13 million children who are eligible for SMC and could benefit but live in areas which do not have SMC programmes. The urgent need to close this gap and to optimize SMC delivery to protect all eligible children was stressed in a technical consultation organized by WHO's Global Malaria Programme and TDR (the Special Programme for Research and Training in Tropical Diseases)[1]. The OPT-SMC project aims to contribute to this goal by strengthening capacity of national programmes to conduct implementation research, to adapt SMC to the local context, and to improve its delivery and impact.

NATIONAL PROGRAMMES AND PARTNERS RISING TO THE CHALLENGE

With funding from the European and Developing Countries Clinical Trials Partnership (EDCTP), the OPT-SMC project will support 14 countries in West Africa and Central Africa to conduct implementation research on SMC, working in partnership with the University of Thiès in Senegal, TDR, Medicines for Malaria Venture (MMV), and the London School of Hygiene and Tropical Medicine (LSHTM).

EDCTP

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

MMV Medicines for Malaria Venture

TDR For research on diseases of poverty
UNICEF • UNDP • World Bank • WHO

UNIVERSITE DE THIES

[1] *WHO Technical consultation on seasonal malaria prevention: evidence review and data requirements for policy update. Meeting report, 14-15 October 2019, Geneva, Switzerland*

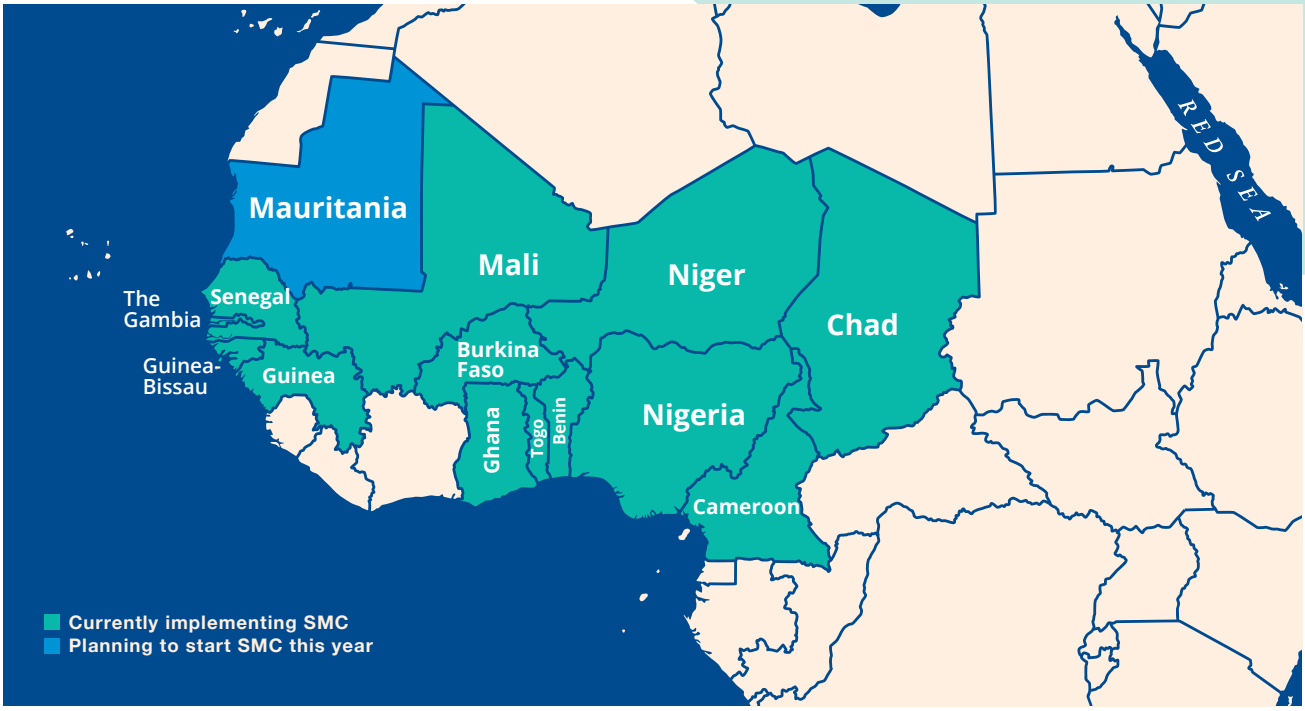
OBJECTIVES OF THE OPT-SMC PROJECT

The specific objectives of the project are as follows:

- Strengthen capacity of national malaria control programmes (NMCPs)
  - to conduct implementation research to understand barriers to effective SMC delivery, including those related to community engagement, and take steps to overcome those barriers and
  - to monitor SMC delivery and evaluate its impact.
- Promote inter-country collaboration and sharing of information, experience and expertise, so that countries can benefit from each other's experience and apply lessons learned.

COUNTRIES PARTICIPATING IN THE PROJECT

This project builds on and strengthens an existing network of countries involved in SMC in West and Central Africa – the SMC Working Group – established in 2013 by Roll Back Malaria. The advisory group supporting this project will comprise representatives of donor agencies, NGOs involved in SMC, the West African Health Organization (WAHO) and WHO.



TIMELINE

Over four years (2020-2024), countries will be supported to plan and conduct implementation research to improve and adapt SMC delivery. An immediate priority is planning for safe delivery during the current COVID-19 pandemic. The WHO Global Malaria Programme and the SMC Working Group are developing guidance for countries to maintain distribution of SMC during the pandemic.

> ***"As COVID-19 continues its rapid spread, WHO would like to send a clear message to malaria-affected countries in Africa. Do not scale back your planned malaria prevention, diagnostic and treatment activities. If someone living in a place with malaria develops a fever, he or she should seek diagnosis and care as soon as possible."***
>
> **- Dr Pedro Alonso**
> Director of the WHO Global Malaria Programme

For more information, please contact Corinne Merle (merlec@who.int) of TDR, Paul Milligan (paul.milligan@lshtm.ac.uk) and Susana Scott (susana.scott@lshtm.ac.uk) of LSHTM, Jean Louis Ndiaye (jlndiaye@univ-thies.sn) of University of Thiès, or Andre Marie Tchouatieu (tchouatieua@mmv.org) MMV.